

great defect is in their physical texture, they cannot absorb necessary matter from the atmosphere, and the same condition prevents the solubility of necessary substances which may be present, but not in a form capable of being used by the plant.

The necessary constituents too which may be set free by atmospheric or other causes, is speedily washed out by heavy rains, the surface soil being a mere filter through which all the nutriment of crops easily percolates.

On this account these soils gain but little by long rest, for the substances which the "tooth of time" sets free are carried down by rains and borne beyond the reach of the plant. These soils then should be cultivated every alternate year, for they gain nothing by more prolonged rest.

Each enclosure should be a double field, that is, divided into two parts, upon one of which the grass should be suffered to grow while the other is in cultivation; correct rules and observation indicate this to be the best mode of cultivation of this variety of soils. The common "lady pea" should be sown in these lands broad cast about the beginning of May or June.

It will give, by its decomposition, carbonic acid to set free the valuable constituents of the soil. Their chemical deficiencies are magnesia, lime and sulphuric acid. They have enough of the chief constituent of bones and abundance of potash and soda, all valuable and costly constituents. From 25 to 30 bushels of magnesian lime should be applied at every fourth or fifth year, and plaster be sown on the corn crop just before it begins to tassel, and upon the uncultivated land early in the season. An abundant crop of woolly-head clover will be the consequence, with great consequent improvement.

This soil is found to a small extent in the southern border of Montgomery county, at the head of Severn, and on Magothy river, in the Piney woods district of Anne Arundel county, thence extending down on the banks of the Patuxent for a few miles back into the country, and may be found in Prince George's, and some parts of Charles and St. Mary's counties. Those in the upper part of Anne Arundel prove very fine for early marketing, and on this account are of value.

Specimen from near Pumphrey's mill, in Anne Arundel county.

Organic matter,	:	:	:	2.30
Sand,	:	:	:	94.70
Clay and iron as peroxide,	:	:	:	2.21
Iron and alumina as phosphates,	:	:	:	.10
Lime,	:	:	:	.13